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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

032326-137

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)

Unassigned

**09/831147**INTERNATIONAL APPLICATION NO.  
PCT/FR99/02608INTERNATIONAL FILING DATE  
27 October 1999PRIORITY DATE CLAIMED  
5 November 1998

TITLE OF INVENTION

**SMART CARD CUSTOMIZING SYSTEM**

APPLICANT(S) FOR DO/EO/US

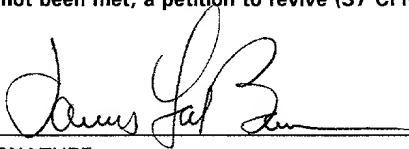
**Francois MAUREL**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and the PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. to 16. below concern other document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.
   
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☐ Other items or information:

U.S. APPLICATION NO. (If known, see 37 CFR 1.501) Unassigned <b>09/831147</b>		INTERNATIONAL APPLICATION NO PCT/FR99/02608		ATTORNEY'S DOCKET NUMBER 032326-137	
17. <input checked="" type="checkbox"/> The following fees are submitted:				<b>CALCULATIONS</b>	PTO USE ONLY
<b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b>  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... \$1,000.00 (960)  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... \$860.00 (970)  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$710.00 (958)  International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... \$690.00 (956)  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) ..... \$100.00 (962)					
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				\$ 860.00	
Surcharge of \$130.00 (154) for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)). 20 <input type="checkbox"/> 30 <input type="checkbox"/>				\$ -0-	
Claims	Number Filed	Number Extra	Rate		
Total Claims	10 -20 =	-0-	X\$18.00 (966)	\$ -0-	
Independent Claims	1 -3 =	-0-	X\$80.00 (964)	\$ -0-	
Multiple dependent claim(s) (if applicable)			+ \$270.00 (968)	\$ -0-	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 860.00	
Reduction for 1/2 for filing by small entity, if applicable (see below).				\$ -0-	-
<b>SUBTOTAL =</b>				\$ 860.00	
Processing fee of \$130.00 (156) for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492(f)). 20 <input type="checkbox"/> 30 <input type="checkbox"/>				\$ -0-	
<b>TOTAL NATIONAL FEE =</b>				\$ -0-	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 (581) per property +				\$ -0-	
<b>TOTAL FEES ENCLOSED =</b>				\$ 860.00	
				Amount to be: refunded	\$
				charged	\$
<p>a. <input type="checkbox"/> Small entity status is hereby claimed.</p> <p>b. <input checked="" type="checkbox"/> A check in the amount of \$ <u>860.00</u> to cover the above fees is enclosed.</p> <p>c. <input type="checkbox"/> Please charge my Deposit Account No. <u>02-4800</u> in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>02-4800</u>. A duplicate copy of this sheet is enclosed.</p> <p><b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b></p> <p>SEND ALL CORRESPONDENCE TO:</p> <p>James A. LaBarre BURNS, DOANE, SWECKER &amp; MATHIS, L.L.P. P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620</p> <div style="text-align: right; margin-top: 20px;">         SIGNATURE         James A. LaBarre        NAME   <u>28,632</u>        REGISTRATION NUMBER     </div>					

09/831147

JC08 Rec'd PCT/PTO 07 MAY 2001

Patent

Attorney's Docket No. 032326-137

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
	)	
Francois MAUREL	)	Group Art Unit: Unassigned
	)	
Application No.: Unassigned	)	Examiner: Unassigned
	)	
Filed: May 2, 2001	)	
	)	
For: SMART CARD CUSTOMIZING	)	
SYSTEM	)	

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination and the calculation of filing fees, kindly amend the above-identified application as follows:

**IN THE SPECIFICATION:**

Page 1, immediately following the title appearing on lines 1 and 2, insert the following:

--This disclosure is based upon, and claims priority from French Application No. 98/13938, filed on November 5, 1998 and International Application No. PCT/FR99/02608 filed October 27, 1999, which was published on May 18, 2000 in a language other than English, the contents of which are incorporated herein by reference.

**Background of the Invention--**

Page 2, before line 27, insert the following heading:

--**Summary of the Invention**--.

Page 6, between lines 20 and 21, insert the following heading:

--**Brief Description of the Drawings**--.

Page 7, before line 1, insert the following heading:

--**Detailed Description**--.

Add the following Abstract:

--A system for customizing smart cards wherein data must be registered so as to be adapted to the use for which they are designed. Each customizing machine having several customizing stations is connected to a computer equipped with a multi-port card by a serial type computer connection of the multi-port card, which transmits cryptographic data of peripheral devices. The customizing data is supplied by a control device via a communication bus. The invention is applicable to microprocessor cards.--

**IN THE CLAIMS:**

Kindly replace claims 1-8, as follows.

1. (Amended) A smart card customizing system comprising:
  - at least one customizing machine equipped with at least one customizing station that sends customizing data requests;

- at least one customizing data server that delivers customizing data and;
- at least one management interface connected to said customizing machine and to said data server by a bi-directional link, said management interface receiving said requests and transmitting them to at least one of said servers as soon as they are received and as soon as said server is available, and receiving the corresponding response and transmitting it to the requesting customizing station.

2. (Amended) A system for customizing smart cards according to Claim 1, wherein said management interface coordinates the execution of at least the following types of tasks at the same time for each customizing station:

- monitoring the occurrence of a request,
- monitoring the availability of each server,
- transmitting the request to a server as soon as it is available,
- receiving the data responding to the request, and
- transmitting the response data to the requesting customizing station as soon as they are received.

3. (Amended) A system for customizing smart cards according to claim 1, wherein said management interface has:

- a computer equipped with a multi-port card,
- each data server and each customizing station being respectively connected to the computer by a serial link on the multi-port card, and

- a multitask real-time operating system for operating said tasks at the same time and in real time.

4. (Amended) A system according to Claim 1, wherein each customizing station comprises:

- a microprocessor,
- a reader/encoder,
- a first computer link of the serial type between the microprocessor and a computer of the server, and
- a second computer link of the serial type between the microprocessor and the reader-encoder.

5. (Amended) A system according to Claim 4, wherein the first and second computer links of the serial type are produced by connecting predetermined output terminals of an output connector of the microprocessor to an adaptation device.

6. (Amended) A system according to Claim 5, wherein the adaptation device comprises:

- a switching circuit comprising two switches whose input terminal is connected to a clock output terminal and to an output terminal for data signals, the switching being controlled by a programming signal on another predetermined output terminal,

- two adaptor circuits, the two input terminals of which are each connected to an output terminal of a switch, said adaptor circuits also being connected to an output terminal for the electrical power supply and to a ground reference output terminal of the output connector.

7. (Amended) A system for customizing smart cards according to claim 1, wherein said server is an enciphering data server.


8. (Amended) A system for customizing smart cards according to claim 1, further including a control device for supplying additional customizing data, said device being connected by means of a communication bus to each customizing station of a customizing machine.

**REMARKS**

Entry of the foregoing amendment is respectfully requested. This amendment is intended to place the claims in a more conventional format and eliminate the multiple dependency of the claims.

Respectfully submitted,

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Date: May 7, 2001



**Attachment to Preliminary Amendment dated May 7, 2001**

**Marked-up Claims 1-8**

1. (Amended) A smart card customizing system [characterised in that it comprises] comprising:
  - at least one customizing machine [(MP) each] equipped with at least one customizing station [(PP) sending] that sends customizing data requests;
  - at least one customizing data server [(SD) delivering] that delivers customizing data and;
  - at least one management interface connected [on the one hand to at least one of the] to said customizing [machines (MP) and on the other hand to at least one of the] machine and to said data [servers] server by a bi-directional link, [the] said management interface receiving [the] said requests[,] and transmitting them to at least one of [the] said servers as soon as they are received and as soon as said server is available, and receiving the corresponding response and transmitting it to the requesting customizing station[, characterised in that the said management interface is able to manage the transmission of the applications/requests or customizing data requirements to at least one of the said servers as soon as they are received and as soon as the said server is available].
2. (Amended) A system for customizing smart cards according to Claim 1, [characterised in that the] wherein said management interface coordinates the execution of at least the following types of tasks at the same time [or periodically and] for each customizing station [at least the following types of task]:

**Attachment to Preliminary Amendment dated May 7, 2001**

**Marked-up Claims 1-8**

- monitoring the occurrence of a request,
- monitoring the availability of each server,
- transmitting the request to a server as soon as it is available,
- receiving the data responding to the request, and
- transmitting the response data to the requesting customizing station as soon as

they are received.

3. (Amended) A system for customizing smart cards according to [one of the preceding claims, characterised in that the] claim 1, wherein said management interface has:

- a computer [(PC)] equipped with a [multiway] multi-port card [(CM)],
- each data server and each customizing station being respectively connected to the computer by a serial link on the [multiway] multi-port card [(CM)], and
- a multitask real-time operating system for operating [the] said tasks at the same time and in real time.

4. (Amended) A system according to Claim 1, [2 or 3, characterised in that] wherein each customizing station comprises:

- a microprocessor [(TBP)],
- a reader/encoder [(LE)],

**Attachment to Preliminary Amendment dated May 7, 2001**

**Marked-up Claims 1-8**

- a first computer link of the serial type [(LS)] between the microprocessor [(TBP)] and [the] a computer [(PC)] of the server [(SD)], and
- a second computer link of the serial type [(LLE)] between the microprocessor [(TBP)] and the reader-encoder [(LE)].

5. (Amended) A system according to Claim 4, [characterised in that] wherein the first and second computer links of the serial type [(LS, LLE)] of each microprocessor (TBP)] are produced by connecting [certain] predetermined output terminals [(V<sub>pp</sub>, V<sub>cc</sub>, CLK, I/O GND)] of an output connector [(COS)] of the microprocessor [(TBP)] to an adaptation device [(DA)].

6. (Amended) A system according to Claim 5, [characterised in that] wherein the adaptation device [(DA)] comprises:

- a switching circuit [(RS)] comprising two switches [(RS1, RS2)] whose input terminal is connected [in one case (RS1) to the] to a clock output terminal [(CLK)] and in the other case (RS2) to the] and to an output terminal for [the] data signals [(I/O)], the switching being controlled by a programming signal on [the] another predetermined output terminal [(V<sub>pp</sub>)],
- two adaptor circuits [(SLA1, SLA2)], the two input terminals of which are each connected to an output terminal of a switch [(RS1, RS2), the], said adaptor circuits also

**Attachment to Preliminary Amendment dated May 7, 2001**

**Marked-up Claims 1-8**

being connected to [the] an output terminal  $[(V_{cc})]$  for the electrical power supply and to [the earth] a ground reference output terminal  $[(GND)]$  of the output connector  $[(COS)]$ .

7. (Amended) A system for customizing smart cards according to [one of the preceding claims, characterised in that the] claim 1, wherein said server is an enciphering data server.

8. (Amended) A system for customizing smart cards according to [one of the preceding claims, characterised in that it comprises] claim 1, further including a control device  $[(DC)]$  for supplying additional customizing data, [the] said device being connected by means of a communication bus  $[(PC)]$  to each customizing station  $[(PP)]$  of a customizing machine.

2/PRTS

SMART CARDS CUSTOMIZING SYSTEM

The invention relates to smart cards and, more particularly, a system for the mass customizing of microcircuit cards.

5           Microcircuit card means a plastic card in the thickness of which a microcircuit is housed. According to the usage of the card, it is necessary to record data issuing from a data and calculation file in the memory of a microcircuit, notably a chip with or  
10 without a microprocessor. These operations are called "customization" of the microcircuit card and are carried out by a customizing machine. The time taken to carry out these operations is between 15 and 30 seconds per card for cards used in mobile telephones, for  
15 example.

These operations are carried out by a machine comprising several customizing lines or appliances in parallel, which each comprise a reader/encoder in which

the customizing program is downloaded and which functions autonomously by means of a microprocessor.

The customized data of each card are supplied to the reader/encoder by a peripheral device via a communication bus associated with a control device.

However, in order to take account of the security aspects, it is necessary to provide additional functions, such as:

- calculating so-called transportation keys for releasing the microcircuit before the customizing operations,

- calculating a session key for protecting the data to be introduced into the card, and

- calculating a certificate which authorises the creation of a directory or a file.

These functions entail a dialogue between each customizing appliance and a peripheral device, notably for each file or directory creation, and hence a very high exchange of data.

At the present time, these data exchanges are effected by means of a communication bus which connects each customizing appliance, station or line to a peripheral encrypting device capable of calculating the certificates for creating each file, and this for each card. However, the capacity of the bus is insufficient for managing such a volume of data exchanges.

One aim of the present invention is therefore to produce a smart card customizing system which does not have the limitations of the systems of the prior art, by improving the data exchange flows between the

customizing lines or appliances and the peripheral encrypting devices.

5 This aim is achieved by using an architecture for communication between the customizing appliances or lines and the peripheral devices in which on the one hand the customizing lines receive customizing data through a communication and on the other hand a data server supplies the encrypting data to the customizing lines by means of computer links, the encrypting data  
10 being supplied by peripheral encrypting devices via computer links.

15 This architecture makes it possible to limit the data traffic on the communication bus by allocating it to the customizing data, the encrypting data being conveyed by other computer links.

Moreover, in the prior art, each customizing station is designed to act on a data server in a predetermined fashion.

20 The drawback lies in the risk of a request to a data server from two or more customizing stations at the same time when another data server is available. This causes a wait in the task of the customizing station.

25 Another aim of the invention is therefore to optimise the response time of a data server vis-à-vis a request from a customizing station.

30 This aim is achieved by having recourse to an interface management means, disposed between the customizing machines and the servers, which is informed about and takes account of the availability of a server

for responding as quickly as possible to the request from a customizing station.

The invention concerns a smart card customizing system characterised in that it comprises:

5       - at least one customizing machine each equipped with at least one customizing station sending customizing data requests;

      - at least one customizing data server delivering customizing data;

10       - at least one management interface connected on the one hand to at least one of the said customizing machines and on the other hand to at least one of the said data servers by a bi-directional link, the said management interface receiving the said requests, 15 transmitting them to at least one of the said servers, receiving the corresponding response and transmitting it to the requesting customizing station,

      characterised in that the said management interface is able to manage the transmission of the applications/requests or customizing data requirements 20 to at least one of the said servers as soon as they are received and as soon as the said server is available.

The management interface coordinates the execution at the same time or periodically and for each 25 customizing station of at least the following types of task:

      . monitoring the occurrence of a request,  
      . monitoring the availability of each server,  
      . transmitting the request to a server as soon as 30 it is available,



- . receiving the data responding to the request,
- . transmitting the response data to the requesting customizing station as soon as they are received.

5        This management interface comprises:

- a computer equipped with a multiway card,
- each data server and each customizing station being respectively connected to the computer by a serial link on the multiway card,
- 10       - a multitask real-time operating system for performing the said tasks at the same time and in real time.

      Thus this system makes it possible, for a production site, to determine the necessary and sufficient data server requirements with respect to a  
15       profitability or productivity objective. In fact, in the prior art, in order to achieve the same objective, it was necessary to have excess data servers, which can be very costly.

20       The invention also makes it possible:

- to interface all types of machines coming from different manufacturers and having different communication configurations;
- to optimise to the maximum possible extent the  
25       sharing of resources external to the customizing method, namely:
  - . data server,
  - . enciphering "black" boxes,

. any other peripheral necessary for electrical customization (access control module, notably in the form of a smart card etc);

- to optimise to the maximum possible extent the sharing of these resources with one or more customizing machines;

- to physically separate the data server (which may be physically in a very highly protected area, and to dialogue with the data server/management interface in a protected message).

This data server/management interface is based on a real-time PC system which is "cascadable", which means that several management interfaces can be connected together in a cascade by a local network. It is thus possible to increase the power of the customizing system, the operating system of a management interface being able to manage the whole directly. This ability is particularly advantageous since it confers very great flexibility on the customizing system.

Other characteristics and advantages of the present invention will emerge from a reading of the following description of a particular example embodiment, the said description being given in relation to the accompanying drawing, in which:

- Figure 1 is a functional diagram of a smart card customizing system according to the invention, and

- Figure 2 is a diagram of a device which makes it possible to convert a connector into two serial-type computer links.

A smart card customizing system according to the invention comprises, for example, four customizing machines MP1 to MP4, which are each connected to a data server SD by computer links of the serial type LS.

5        Each customizing machine MP1, MP2, MP3 or MP4 for smart cards CP comprises, for example for the machine MP1,

10        - for example six customizing lines or stations PP1 to PP6 in parallel for simultaneously customizing six smart cards CP1 to CP6,

      - a control device DC containing the customizing data for each card to be customized,

15        - a communication bus BC for transmitting to each customizing station PP1 to PP6 the customizing data for each smart card CP1 to CP6 supplied by the control device DC,

20        - computer links of the serial type LS1 to LS6, at least one per customizing station, for transmitting to each customizing station the cryptographic data for each card being customized.

      Each customizing station PP1 to PP6 comprises:

25        - a reader/encoder referenced LE1 for the station PP1 and LE6 for the station PP6, this reader/encoder, more commonly referred to as a reader, being for example the one sold by the applicant under the reference GCI400DC,

      - a microprocessor, referenced TBP1 for the station PP1 and TBP6 for the station PP6, each microprocessor having two computer links of the serial

type, one LS1 to LS6 to the data server SD and the other LL1 to LL6 to the reader/encoder.

The data server SD comprises:

5 - a computer such as a personal computer PC which is equipped with a multiway card CM, a multitask real-time system,

10 - for example six peripheral encrypting devices DEP1 to DEP6, the initials DEP being the acronym for the English expression "Data Encryption Peripheral", these peripheral devices DEP1 to DEP6 each being connected to the computer PC by a serial link LD1 to LD6 on the multiway card CM.

15 In the diagram in Figure 1, the data server SD is designed to manage four customizing machines MP1 to MP4 each having six customizing stations, each customizing station being connected by a serial link LS to an input of the multiway card CM.

20 The function of the computer PC is to manage the cryptographic data requests of each customizing station by addressing the peripheral devices DEP1 to DEP6 via the serial links LD1 to LD6 and transmitting the cryptographic data to the customizing appliance via the serial links LS1 to LS6.

25 In this example embodiment, each microprocessor TBP is equipped with two serial links LS, one LS to the computer PC and the other LLE to the reader/encoder LE. However, where the microprocessor TBP is equipped not with two serial links but with an eight-conductor connector COS, for example, some of these conductors  
30 may be used for effecting serial links using an

adaptation device DA which comprises two adaptors for serial connection SLA1, SLA2 and a switching circuit RS according to the diagram in Figure 2.

Figure 2 depicts the eight terminals of an output connector COS comprising:

- a terminal RST for resetting,
- a terminal  $V_{pp}$  for the programming voltage,
- a terminal  $V_{cc}$  for the supply voltage,
- a terminal CLK for the clock signal,
- a terminal I/O for the data signals,
- a terminal GNP for the earth potential,
- a terminal FUSE 1 for a first programming fuse,
- a terminal FUSE 2 for a second programming fuse.

To effect a single serial link, the terminals CLK, I/O,  $V_{cc}$  and GND are connected to an adaptor which supplies the serial signals on two output terminals Rx and Tx.

To effect two serial links, the terminals CLK and I/O are connected to a double switch RS whose position is controlled by the signal on the terminal  $V_{pp}$ . A first switch RS1 is connected to the clock terminal CLK by its input terminal and to the input terminal CLK of two adaptors SLA1 and SLA2 by its two output terminals. A second switch RS2 is connected to the terminal I/O by its input terminal and to the input terminals I/O of the two adaptors SLA1 and SLA2 by its two output terminals.

The terminal  $V_{pp}$  is connected to the two switches RS1 and RS2 whilst the terminals  $V_{cc}$  and GND are connected to the adaptors SLA1 and SLA2. These

5

As is known, the terminal Tx1 or Tx2 is allocated to the transmission of the signal whilst the terminal Rx1 or Rx2 is allocated to the reception of the signal.

## CLAIMS

1. A smart card customizing system characterised in that it comprises:

5       - at least one customizing machine (MP) each equipped with at least one customizing station (PP) sending customizing data requests;

      - at least one customizing data server (SD) delivering customizing data;

10       - at least one management interface connected on the one hand to at least one of the said customizing machines (MP) and on the other hand to at least one of the said data servers by a bi-directional link, the said management interface receiving the said requests, transmitting them to at least one of the said servers,  
15       receiving the corresponding response and transmitting it to the requesting customizing station,

      characterised in that the said management interface is able to manage the transmission of the applications/requests or customizing data requirements  
20       to at least one of the said servers as soon as they are received and as soon as the said server is available.

2. A system for customizing smart cards according to Claim 1, characterised in that the said management interface coordinates the execution at the same time or  
25       periodically and for each customizing station at least the following types of task:

      . monitoring the occurrence of a request,  
      . monitoring the availability of each server,  
      . transmitting the request to a server as soon as  
30       it is available,

. receiving the data responding to the request,  
 . transmitting the response data to the  
 requesting customizing station as soon as they are  
 received.

5           3. A system for customizing smart cards according  
 to one of the preceding claims, characterised in that  
 the said management interface has:

- a computer (PC) equipped with a multiway card  
 (CM),

10           - each data server and each customizing station  
 being respectively connected to the computer by a  
 serial link on the multiway card (CM),

- a multitask real-time operating system for  
 operating the said tasks at the same time and in real  
 15           time.

4. A system according to Claim 1, 2 or 3,  
 characterised in that each customizing station  
 comprises:

- a microprocessor (TBP),

20           - a reader/encoder (LE),

- a first computer link of the serial type (LS)  
 between the microprocessor (TBP) and the computer (PC)  
 of the server (SD), and

- a second computer link of the serial type (LLE)  
 25           between the microprocessor (TBP) and the reader-encoder  
 (LE).

5. A system according to Claim 4, characterised  
 in that the first and second computer links of the  
 serial type (LS, LLE) of each microprocessor (TBP) are  
 30           produced by connecting certain output terminals ( $V_{pp}$ ,



$V_{cc}$ , CLK, I/O, GND) of an output connector (COS) of the microprocessor (TBP) to an adaptation device (DA).

6. A system according to Claim 5, characterised in that the adaptation device (DA) comprises:

5       - a switching circuit (RS) comprising two switches (RS1, RS2) whose input terminal is connected in one case (RS1) to the clock output terminal (CLK) and in the other case (RS2) to the output terminal for the data signals (I/O), the switching being controlled by a  
10       programming signal on the output terminal ( $V_{pp}$ ),

          - two adaptor circuits (SLA1, SLA2), the two input terminals of which are each connected to an output terminal of a switch (RS1, RS2), the said adaptor circuits also being connected to the output terminal  
15       ( $V_{cc}$ ) for the electrical power supply and to the earth output terminal (GND) of the output connector (COS).

7. A system for customizing smart cards according to one of the preceding claims, characterised in that the said server is an enciphering data server.

20       8. A system for customizing smart cards according to one of the preceding claims, characterised in that it comprises a control device (DC) for supplying additional customizing data, the said device being connected by means of a communication bus (PC) to each  
25       customizing station (PP) of a customizing machine.

1/2

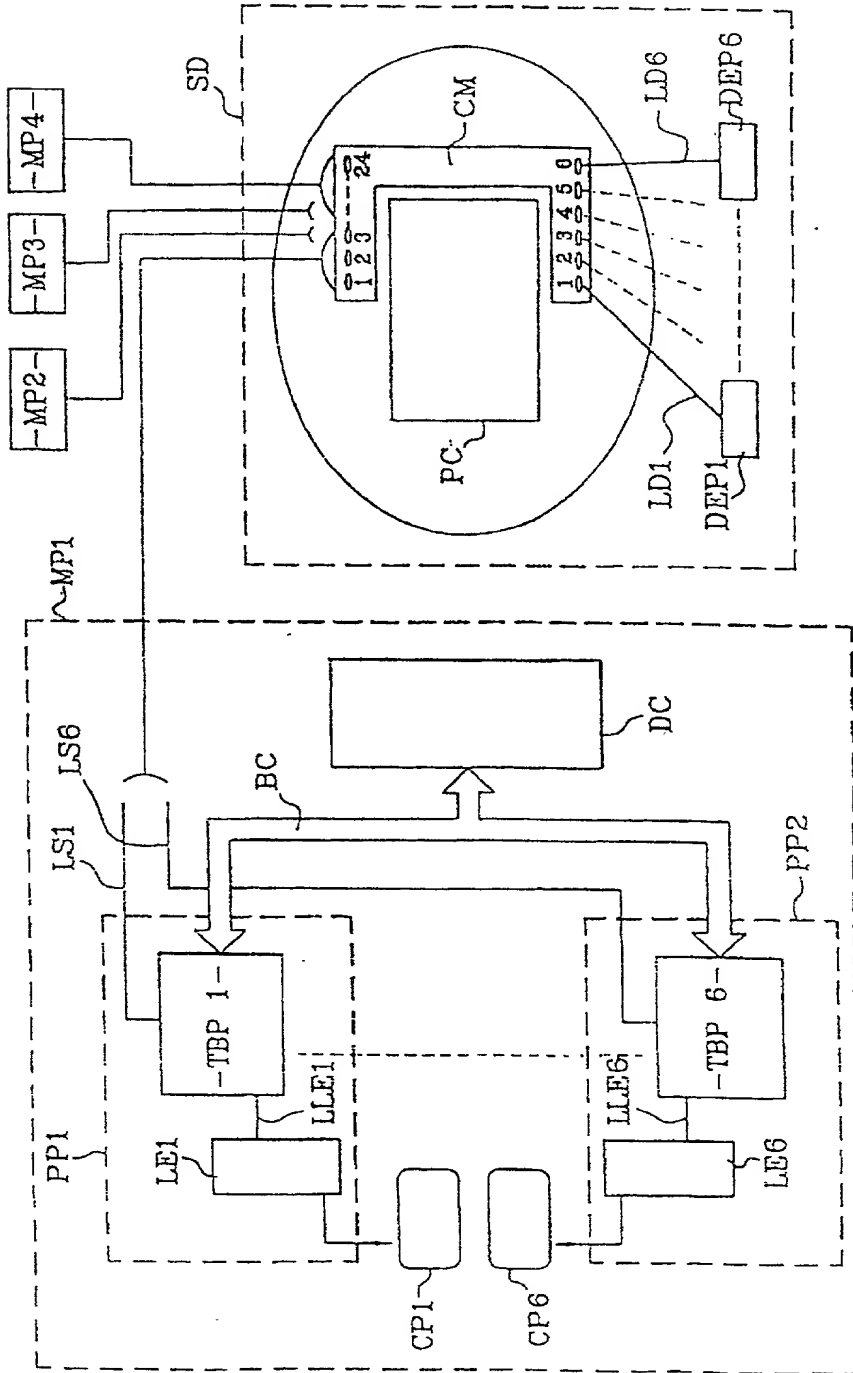
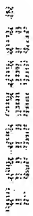


FIG.1



**FIG.2**

047458

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**  
(Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No.

As a below named inventor, I hereby declare that:  
My residence, post office address and citizenship are as stated below next to my name;  
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SMART CAR CUSTOMIZING SYSTEM.

the specification of which (check only one item below)

- is attached hereto.
- was filed as a United States application  
Number \_\_\_\_\_  
on \_\_\_\_\_  
and was amended  
on \_\_\_\_\_ (if applicable)
- was filed as a PCT international application  
Number PCT/FR99/02608  
on 27.10.1999  
and was amended  
on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(e) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

**PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. § 119:**

COUNTRY (if PCT, indicate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. § 119
FR.	98 19938	5.11.98	<input type="checkbox"/> Yes <input type="checkbox"/> No
PCT	WO 99/28489	18.05.99	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (CONT'D)**  
(Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose to the Office all information known to me to be material to the patentability as defined in Title 37, Code of Federal Regulations § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. § 120:

U.S. APPLICATIONS		STATUS (check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NUMBERS ASSIGNED (if any)		

I hereby appoint the following attorney and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:

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21839

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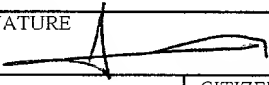
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (CONT'D)**  
(Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No.

FULL NAME OF SOLE OR FIRST INVENTOR <b>MANUEL FRANCOIS</b>		SIGNATURE 	DATE <b>6 April 2001</b>
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RESIDENCE		CITIZENSHIP	
POST OFFICE ADDRESS			
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POST OFFICE ADDRESS			
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POST OFFICE ADDRESS			
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RESIDENCE		CITIZENSHIP	
POST OFFICE ADDRESS			